



THE DEL AMO SITE: PUBLIC HEALTH ASSESSMENT RECOMMENDATIONS AND FINDINGS

March 2003

Background

The Del Amo site is a hazardous waste site in western Los Angeles County, between the cities of Torrance and Carson. The harmful chemicals at Del Amo came from a company that was on the site. The company, which made synthetic rubber, opened in 1942 and closed in 1972. Most of the site has been made into an industrial park. Since 1983, residents and government agencies such as the California Department of Health Services (CDHS) and the U.S. EPA have been working together to make sure that chemicals on the site do not harm the health of the people who live and work near Del Amo.

When the rubber company was in operation, they dumped waste chemicals from the rubber making process into six waste pits and three shallow ponds. The largest amount of harmful chemicals on the site is in this waste pit area. The chemicals are in the soil and in the "soil gases" (gases in the spaces between the particles of soil). There is a fence around the waste pit area and the pits are covered with a "cap" to keep the waste from spreading and prevent people from coming into contact with the waste. The cap is made up of several layers of different materials, including a layer that contains pipes. The soil gases go through the pipes to a "soil gas treatment unit." The treatment unit removes the chemicals from the gases.

Fifty-five homes that were closest to the waste pit area were bought out during the clean up of the site. The soil around two of these homes had hazardous chemicals in it. These chemicals did not come from the Del Amo site. The chemicals have been removed, and this area may be made into a park.

The Public Health Assessment

CDHS conducted a public health assessment (PHA). A PHA includes an examination of the chemicals at a hazardous waste site and the area around it. A PHA is done to find out if the chemicals at a site could harm the health of people who live or work near the site. This fact sheet includes a summary of what we learned from the PHA and the recommendations we made, as well as information about comments or questions you may have about the PHA.

Recommendations

Although most of the areas on the Del Amo site do not pose a health risk, some areas may pose a slight health risk.

Below are some of the recommendations CDHS made to the U.S. EPA and others to make sure that the chemicals do not cause health problems:

- Make sure that the cap over the waste pit area, and the fences around the soil gas treatment units, are in good condition. This will keep the chemicals from spreading, and prevent people from coming into contact with the waste, and make sure that the treatment unit is not damaged. (Ongoing.)
- Make sure that the method used to get rid of chemicals from the soil gas will not harm anyone's health.
- Test the air in buildings that are built over groundwater that has large amounts of chemicals in it to find out if harmful soil gas is getting in. (Some tests have been done, and more are underway.)
- Make sure that chemicals in the groundwater do not get into wells that are used to supply water to the public. (Planning has begun.)
- Make sure that harmful amounts of chemicals in the soil gas do not get into the air when there is construction.
- Make sure that as little dust as possible is made when more construction is done. Chemicals in the soil could be breathed in if there is dust. Also, when any buildings, parking lots or roads are dug up on the site, the soil that was underneath them should be tested to see if there are harmful amounts of chemicals.

Main Findings of the Del Amo Public Health Assessment

Soil Gas on the Del Amo Site

- Soil gas could get into some buildings on the Del Amo site. The buildings that could have this problem are ones that were built over soil and groundwater that have large amounts of harmful chemicals in it (see map). For example, some areas have very high levels of the chemical benzene. If you add small amounts of benzene to water, the benzene dissolves. If you add very large amounts to water, it does not dissolve. Instead, it stays separate, like oil and water. When this happens, the benzene (or other chemical) is called light non-aqueous phase liquid (LNAPL). Even though the contamination is far below the surface, harmful chemicals from LNAPL can get into the soil gas, and into the buildings, and may

cause health problems. The LNAPL was found under the waste pits and under some areas where the former rubber plant was located (north of Del Amo Blvd.) (see map).

Surface Soil Testing Where the Homes Were Bought Out (Future Park)

- The surface soil in this area was tested before the homes were bought out. The tests found only very small amounts of chemicals from the Del Amo site. These small amounts would not be harmful to anyone's health. The homes next to the soil gas processing area were bought out so that the construction of the cap could happen as quickly and efficiently as possible. The people responsible for building the cap decided that it was best to move residents away from the site.
- Now that the two homes where DDT was found have been cleaned up, the levels of other hazardous chemicals in the surface soil (like arsenic and lead) are too low to harm anyone's health.

Drinking water:

- Some of the groundwater under and around the Del Amo site has harmful chemicals in it. This groundwater is far from the drinking water wells.
- There are no wells that get water from the contaminated groundwater. This means that chemicals in the groundwater at Del Amo are not in any water used by people or businesses.
- There are three water companies that operate 14 drinking water wells within four miles of the site: California Water Service Company, Southern California Water Company, and the City of Torrance Water Department. The water from these companies is tested to make sure that it is safe to drink.

Waste pit area before it was capped:

- The waste material in the pits was covered with dirt and other material as far back as the 1950s. A fence was built around the pits in the 1980s. However, residents said that when they were children, they played at the waste sites and they saw waste material on the ground. If children played with the waste material often, they would have a slightly higher chance of getting cancer and other health problems.
- CDHS does not expect that breathing the air in the waste pit area before it was capped would cause health problems.

Past Activities

The PHA looked at information from past activities. The following activities were carried out to address community

concerns and to find out if the chemicals from the site have affected the health of the community:

- A study of the health of community members was done in the late 1980s. The study and review indicated that residents living near the Del Amo site did not have higher than expected rates of cancer, miscarriage or other reproductive problems, or death. Although there were higher rates of liver disease, residents who had this health problem did not live closer to the site than residents without liver problems. Therefore, the liver problems were not thought to be related to the chemicals on the site. The study also found higher than expected rates of skin, eye, nose, and throat irritation as well as earaches, dizziness, and fatigue. People who had these health problems lived closer to Del Amo than people who did not have these health problems. Therefore, chemicals on the site could have caused these health problems, or they could have been caused by other sources of contamination (such as nearby industry or vehicle exhaust) in the area.
- The University of California at Irvine developed a two-year program, the Del Amo/Montrose Community Environmental Health Program. The program offered a range of diagnostic health services to 596 residents living near the Del Amo site. The services included blood tests for DDT, and a variety of other medical tests and health questionnaires to find out about health problems that could have been caused by contact with chemicals from the Del Amo and Montrose sites. Although this was not a health study, the investigators did look for patterns of health problems among the people who participated in the program. They found that people in the neighborhood did not seem to have health problems related to the Del Amo site.

Public Comment Period

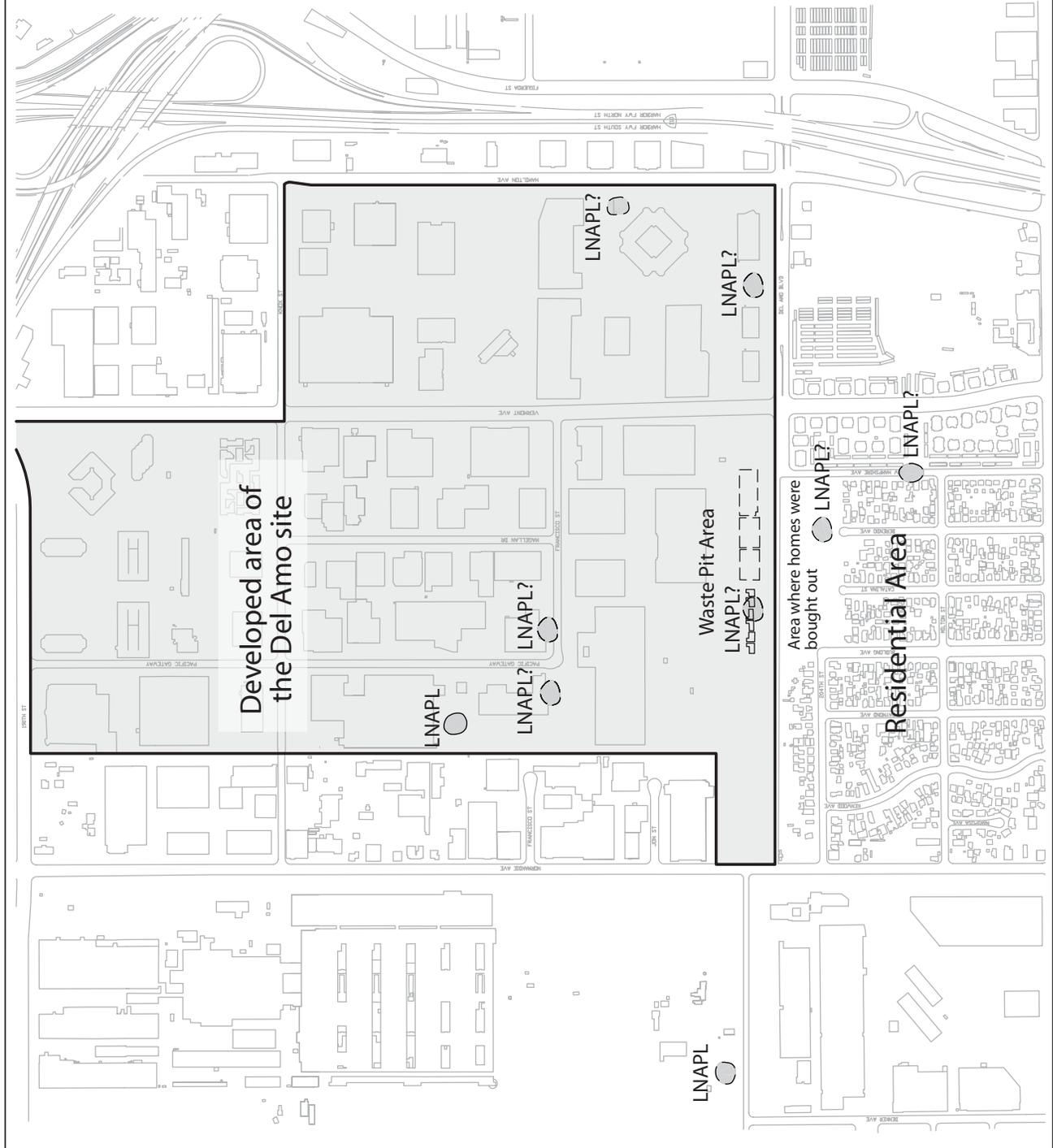
This fact sheet contains some of the main findings of the public health assessment. CDHS invites you to read the complete report, which is available at the Torrance Civic Center Library, 3031 Torrance Blvd., Torrance. The public comment period is from April 7 to May 16, 2003. Please send your comments or questions about the public health assessment report in writing to:

Tivo Rojas
California Department of Health Services
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1515 Clay Street, Suite 1700
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If you have any questions about the public comment period, please contact Tivo Rojas at (510) 622-4500 or at trojas@dhs.ca.gov.

This fact sheet was produced with funding from the Agency for Toxic Substances and Disease Registry (ATSDR), U.S. Department of Health and Human Services (www.atsdr.cdc.gov).

Del Amo Site and Surrounding Area



Explanation

-  Known area of LNAPL
-  Approximate area of LNAPL
-  LNAPL? Area of suspected LNAPL

Note: This map shows only an approximation of the size and shape of known and suspected areas of LNAPL.





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Public Comment Period April 7 to May 16, 2003

EL SITIO DEL AMO EVALUACIÓN DE SALUD PÚBLICA RECOMENDACIONES Y RESULTADOS

El período de comentario público es de Abril 7 a Mayo 16, 2003



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